

## (2) Commercial Power Reactor Facilities in a Research and Development Stage

Facility		Radioactive gaseous waste		
		Noble gas (Bq)	Iodine [ <sup>131</sup> I] (Bq)	Tritium [ <sup>3</sup> H] (Bq)
Japan Atomic Energy Agency Advanced Thermal Reactor Fugen Power Station	Nuclear reactor facilities total	N.D.	N.D.	<sup>11</sup> 4.7×10
	Annual release Target control level	*1 -	*1 -	*2 1.8×10 <sup>13</sup>
Japan Atomic Energy Agency Monju Prototype Fast Breeder Reactor	Nuclear reactor facilities total	N.D.	N.D.	<sup>9</sup> 1.7×10
	Annual release Target control level	<sup>13</sup> 8.2×10	<sup>8</sup> 1.5×10	-

Facility		Radioactive liquid waste	
		Total radionuclides (excluding <sup>3</sup> H) (Bq)	Tritium [ <sup>3</sup> H] (Bq)
Japan Atomic Energy Agency Advanced Thermal Reactor Fugen Power Station	Nuclear reactor facilities total	N.D.	<sup>12</sup> 1.4×10
	Annual release Target control level	*3 2.8×10 <sup>8</sup>	<sup>13</sup> 1.1×10
Japan Atomic Energy Agency Monju Prototype Fast Breeder Reactor	Nuclear reactor facilities total	N.D.	*4 2.0×10 <sup>8</sup> (N.D.)
	Annual release Target control level	<sup>9</sup> 5.5×10	<sup>12</sup> 9.2×10

Note: The radioactivity (Bq) of gaseous (or liquid) waste is obtained by multiplying the concentration of the radioactive material (Bq/cm<sup>3</sup>) in the released gas (or liquid) by the amount of released gas (or liquid) (m<sup>3</sup>). Values lower than the detection limit of radioactivity are indicated as N.D.

The detection limits are as follows.

Radioactive noble gases: 2×10<sup>-2</sup> (Bq/cm<sup>3</sup>) or less

Radioactive iodine: 7×10<sup>-9</sup> (Bq/cm<sup>3</sup>) or less

Total radioactive particulate matter (excluding <sup>3</sup>H): 4×10<sup>-9</sup> (Bq/cm<sup>3</sup>) or less (the <sup>60</sup>Co value is used)

Tritium (gas): 4×10<sup>-5</sup> (Bq/cm<sup>3</sup>) or less

Radioactive liquid waste (excluding <sup>3</sup>H): 2×10<sup>-2</sup> (Bq/cm<sup>3</sup>) or less (the <sup>60</sup>Co value is used)

Tritium (liquid): 2×10<sup>-1</sup> (Bq/cm<sup>3</sup>) or less

\*1: After October 1, 2003, due to the revision of the reactor facility safety regulations, control targets for noble gases and iodine have been removed from the annual release control targets for radioactive gaseous waste.

\*2: Annual release control targets at the exhaust stack of the waste treatment building are as follows.

Tritium (gas): 3.7×10<sup>11</sup> (Bq) or less

\*3: According to the amendment to the Reactor Facility Safety Regulations, the annual liquid radioactive release control target levels have been changed since October 1, 2003.

Total radionuclides (excluding <sup>3</sup>H): 2.8×10<sup>8</sup> (Bq) or less (prior to the amendment: 7.4×10<sup>9</sup> (Bq) or less)

\*4: The value includes the water and steam derived tritium (N.D.).